Chapter III

Research Design

Introduction

Transportation acts as the lifeline of any country. It moves people and goods from one place to another using a variety of vehicles across different infrastructure systems. It does this using not only technology (namely vehicles, energy, and infrastructure), but also people’s time and effort; producing not only the desired outputs of passenger trips and freight shipments, but also adverse outcomes such as air pollution, noise, congestion, crashes, injuries, and fatalities.

Services marketing is the marketing of intangibles. Moreover when it comes to marketing of transportation services, it becomes complicated as transportation is a service where involvement of tangibility is very less. Here the most important point that helps in satisfying the consumers is the Process and the Physical Evidence of the Service being delivered.

3.1 Review of Literature

Several studies have been undertaken on “Services Marketing”, the most prominent among them are listed below:

- **Aqua Management Consulting Group (2009)** - a premier advisory and execution group committed to delivering superior supply chains and maximizing business value to their clients have examined the transportation system in India and have advised a Technical and Software related Transportation system in order to provide better transportation services to the Indian Commuters.

- A Research team jointly headed by Mr. R. Venkatesan, Team Leader Senior Fellow & Head, Industry Programme Area, NCAER and Dr. Simrit Kaur,
Joint Team Leader Senior Consultant, NCAER in their report sponsored by The Competition Commission of India (CCI) have made a list of state-specific recommendations and defined the contours of a proposed model for enhancing the competition in their report entitled “State Policies Affecting Competition: Passenger Road Transportation Sector”.

- **Committee on Public Transportation Marketing and Fare Policy under the Chairman: Daniel K. Boyle** reflects a general sense of the committee regarding developments in the new millennium and has found that Marketing efforts targeted toward each group are obviously different, yet all invoke a sense of the “value” of public transportation. The report also reflects the key components required to increase the “value” of public transportation are Convenience, Comfort, Sense of making Smart choice, Affordability and Reliability.

- **A White Paper on Future of Mobility in India and the Implications for Automotive Companies submitted by Frost and Sullivan (2011)** The future of mobility offers immense challenges and thereby opportunities for automotive players to create innovative products, solutions and business models to meet these challenges. The three key areas identified by them are Information Management, Lower Fuel Consumption and Low Emission Vehicles.

- **International Transport Forum (May 2011)**, an intergovernmental organisation with 52 member countries. It acts as a strategic think tank with the objective of helping shape the transport policy agenda on a global level and ensuring that it contributes to economic growth, environmental protection, social inclusion and the preservation of human life and well-being. The International Transport Forum organizes an annual summit of Ministers along with leading representatives from industry, civil society and academia. Their report on **Equitable Access: Remote and Rural Communities ‘Transport Needs’** conducted in Great Britain concludes that Better value might be obtained by spending available money on bus services or other forms of public
transport. School transport plays an important role in rural areas, often determining the peak capacity provision. It is sensible to fund it on a common basis with the wider public network, and maximize scope for efficient combination the two. Likewise, specialized services provided by public authorities, such as social service transport, should be considered along with provision of scheduled public services to ensure best value for money.

- **Ministry of Road Transport & Highways Government of India (September, 2011),** provides an insight to the barriers and problems faced by road transportation in India, especially by the Interstate public transportation. It also recommends the ways to overcome these problems.

- **Urban ITS (Intelligent Transportation System) Market in India (November 1st, 2011),** a report prepared by Sales and Marketing Department of Metro Infrasys reflects the regular increase in the vehicles has made it essential for every city in India to improve its traffic-transport; tracking and security system to monitor maintain the traffic situation so to smooth the traffic flow and to help the users to get the maximum utilization of the transport system. The report also highlights the list of upcoming Urban ITS projects which are inline with the Investment Strategy by the government and World Bank for India.

At the international as well as at national level, significant efforts have been made by the researchers in the subject by way of research articles. Among the studies conducted, the following important works have been reviewed.

- **Relationship Marketing and Collaborative Networks in Service Organisations by David W. Cravens,** Texas Christian University, Fort Worth, Texas, USA and **Nigel F. Piercy,** Cardiff Business School, University of Wales, UK have laid importance on Customer relationship and network as necessary for the success of service organisations.
• B Nicolaud, Aston University Business School, Birmingham, UK in his study on Problems and Strategies in the International Marketing of Services have provided four main themes necessary in service marketing like Risk of Expansion, Strategic method of Choice of Entry, Management of an extended Marketing Mix, Management of Seller- buyer Relationship.

• Marketing Signals in Service Industries Implications for Strategic Decision Making and Profitability by Paul Herbig and John Milewicz (1994), have given an insight on the use of market signaling allows firms within an industry to gain additional competitive information. This provides them with the opportunity to respond quickly and effectively to competitive challenges.

• Marketing service relationships: the role of commitment by Martin Wetzels, Assistant Professor of Marketing and Marketing Research, Faculty of Economics and Business Administration, Maastricht University, Maastricht, The Netherlands, Ko de Ruyter Associate Professor of Marketing and Marketing Research, Faculty of Economics and Business Administration, Maastricht University, Maastricht, The Netherlands, Marcel van Birgelen Faculty of Economics and Business Administration, Maastricht University, Maastricht, The Netherlands indicates that for the establishment of affective commitment in a supplier-customer relationship, it is very important that a customer has a lot of trust in the supplier’s benevolence and honesty. If a customer believes that the supplier is benevolent, which means that he/she is interested in the customer’s welfare and will not take any unexpected actions which will negatively influence the company, then also more affective commitment will emerge.

• A Frame work for Research in Internal Marketing and the Study of Service Quality: Some Propositions by Marelise Pitt, Johan Bruwer, Deon Nel and Jean - Paul Berthon conclude that internal marketing is a critical issue facing marketing professions, HR managers, and executives in general. Similarly, the issue of service quality has not waned in its importance, despite
the significant progress that has been made in its measurement and management over the past decade. If quality service is to be delivered, employees themselves must be convinced that it is worth delivering both to customers and each other.

- **The impact of congruence in cause marketing campaigns for service firms**
  by Donald P. Roy Jennings, A. Jones College of Business, Middle Tennessee State University, Murfreesboro, Tennessee, USA provide an insight into variables that impact consumer response to cause marketing campaigns by service brands.

- **Service quality models: a review**
  by Nitin Seth and S.G. Deshmukh, Indian Institute of Technology, New Delhi, India, and Prem Vrat, Indian Institute of Technology, Roorkee, India, revealed that the service quality outcome and measurement is dependent on type of service setting, situation, time, need etc factors. In addition to this even the customer’s expectations towards particular services are also changing with respect to factors like time, increase in the number of encounters with a particular service, competitive environment, etc. This paper provides a rich agenda for future research in the subject.

- **Management Control Systems in Public Transport: An objective Study of Karnataka State Road Transport Corporation**
  by Shri D B Prabhu and Shri Sateesh Hegde have analyzed Karnataka State Road Transport Corporation’s control systems and has concluded that Karnataka State Road Transport Corporation’s core belief is customer-centric and employee-centric administration.

  by J. Joseph Cronin, Jr., Florida State University and Roscoe Hightower, Jr., Florida A&M University suggest that public transit marketers are well educated individuals with substantial experience who need additional resources to improve their marketing efforts. Specifically, they need larger staffs, larger bud gets, and more training. If local traffic congestion and air quality problems are to be solved, the above-mentioned resources are
needed. An apparent trend within the industry is that market-oriented transit firms appear to have a growing appreciation of market-based strategies, if not a complete understanding of the practice of marketing. Nevertheless, in all too many instances, the resources needed for successful implementation have not been provided to the transit firm.

- **Impacts of Express Bus Service on Passenger Demand (2008) in Waterloo, Ontario, Toronto** by Jeffrey M. Casello, Ph.D., P.E. Bruce Hellinga, Ph.D., P.Eng. University of Waterloo presents a methodology to assess the impacts of express bus service in areas with existing transit service. The method presented is based on utility theory, the traditional model used in mode choice models.

- **Supply Chain Management: Transport Sector and India’s Development (2008) by P Anbalagan** has reflected in his study that the demand for transport has increased tremendously in India and majority of Indian States are in landlocked regions and for their development, there is a need to improve transport infrastructure which would in turn help to meet the demand of Indian Commuter.

- **Developing a Performance Importance Matrix for a Public Sector Bus Transport Company: A Case Study (2011)** by M. Vetrivel Sezhian, Dr. Paul’s Engineering College, Villupuram, tamilnadu, C. Muralidharan, Annamalai University, Chidambaram, tamilnadu, T. Nambirajan, Pondicherry University, Pondicherry and S.G. Deshmukh, Indian Institute of Technology Delhi, New Delhi presents a study of comparison of the importance attached by the service providers’ and the customers’ with respect to service characteristics towards the public transportation services provided by a bus company.

- **The emergence of the new service marketing: Nordic School perspectives Evert (2012)** by Gummesson, Stockholm University School of Business, Stockholm, Sweden, and Christian Gronroos, Hanken School of Economics, Helsinki, Finland reflects that Making clear that marketing management and
mix theory could not be directly applied to service as it is rooted in B2C mass marketing and mass manufacturing of goods. Long term interactive relationships and networks rather than transactional exchange are considered the core of research in marketing as well as in marketing practice.

- **Growth and Pattern of Bus Service in Punjab (2012) by Sawinder Kaur and Dr. Navkiranjit Kaur** conclude that following liberalization, the share of SRTUs has declined with the entry of private operators to meet the incremental passenger traffic demand. The share of the private sector in the total number of buses has increased. It also reflects that the SRTUs should be innovative in their approach and use modern technologies to provide better service.

- **Understanding the Indian on-road transport customer (2012) by Christian Andersson and Nikhil Puranik** concluded in their study that the National Highways still don’t give the transport companies unhindered passage through many cities, India has various submarkets rather than a single market due to lack in tax reforms leading to many complex problems like state border stoppages, police harassment, corruption and red tape.

- **A Study of the Impact of Decentralization on Productivity in SRTCs of Karnataka by B Madhusudhana** concludes that decentralization has improved financial performance of SRTCs in Karnataka, basically stemming from cost efficiency. Decentralization of public transit in Karnataka is a boon and not a bane and there is a need to examine the decentralization concept intensively by analyzing its impact on other dimensions of public transit on one hand and extensively by evaluating its relevance and effectiveness in other spheres of public service delivery system in India.

- **Efficient Transportation Planning and System Integration for Healthy Environment of Large Cities by Raman Parti and Surjit S Katoch (2009)** deals with a holistic approach for efficient Transportation planning and system integration for better and healthy environment of large cities. Different environmental parameters like Energy efficiency, Passenger – comfort,
Passenger/ Citizen Safety, Environment friendliness with respect to different modes of Transport are also important for Public transportation marketing.

3.2 Statement of the Problem

The main motive of the study is to understand the different services being offered by the organisation. This would help to understand the gap between commuter expectations and the service delivered by North Eastern Karnataka Road Transport Corporation. The study would also help to understand the factors influencing and motivating the commuters to choose different services of North Eastern Karnataka Road Transport Corporation. The study would also help to understand the precautions taken up by North Eastern Karnataka Road Transport Corporation in order deliver a healthy service and even to control pollution as part of their ethics.

3.3 Need for the Study

North Eastern Karnataka Road Transport Corporation after being separated from Karnataka State Road Transport Corporation became one of the revenue generating wings, operating large fleet of bus and providing various kinds of services to its consumers. Over a period of time it has been facing huge competition not only from other private players like Vijayanand Road Lines, SRS Travels and Pavit Travels in state roadways transport, but also from auto rickshaws for their city transportation. In this scenario of ever-growing fuel prices, the study becomes necessary to understand the commuter’s attitude towards the fare hikes and the simultaneous quality of services being delivered by the organisation.

The recent infrastructure facilities provided by North Eastern Karnataka Road Transport Corporation, not only includes better fleet of bus but also new bus stations with better ambience and also increased frequency of buses. Hence it is necessary to understand the past and the present attitude of commuters towards these facilities.
3.4 Objectives of the Study

1. To study the different transport services provided by North Eastern Karnataka Road Transport Corporation.
2. To analyze the satisfaction level of Commuters.
3. To understand the gap between commuter expectations and services delivered.
4. To study the quality of service delivered by the organisation.
5. To measure the factors affecting the satisfaction level of the commuters.
6. To study the commuter perception towards different facilities provided by the organisation.
7. To offer suitable suggestions in the light of findings.
3.5 Methodology

The study is based on both primary and secondary sources. The policy documents of the government, the reports of various committees, journals, magazines, published data and literature relating to the subject have been referred for different secondary sources.

The primary information has been ascertained from the Commuters and general public by applying questionnaire method. The data gathered through the primary sources along with secondary data has been edited and tabulated in order to make it feasible for analysis and interpretation.

3.6 Sampling

A Sample Size of 400 respondents was selected through stratified random sampling as follows:

<table>
<thead>
<tr>
<th>Status</th>
<th>No. of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student</td>
<td>100</td>
</tr>
<tr>
<td>Salaried Employee</td>
<td>100</td>
</tr>
<tr>
<td>Businessman</td>
<td>100</td>
</tr>
<tr>
<td>Agriculturist</td>
<td>100</td>
</tr>
</tbody>
</table>

The Commuters were grouped into genders as follows:

<table>
<thead>
<tr>
<th>Gender</th>
<th>No. of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>344</td>
</tr>
<tr>
<td>Female</td>
<td>56</td>
</tr>
</tbody>
</table>
3.7 Scope of the Study:

The study covers the different Services and Facilities being provided by North Eastern Karnataka Road Transport Corporation for its commuters and general public and hence the commuter’s perception towards these different services and facilities is being provided.

It also suggests how the existing services can be made better in order to increase the satisfaction level of the commuters.

3.8 Statistical Tools and Analysis

Analysis is done with the help of simple percentages, tables and charts.

3.9 Period of Study:

A data of four years from 2009-10 has been considered for the study.

3.10 Limitations of the Study:

The study has the following limitations:

- The study is based on sample respondents of 400.
- The study is confined only to North Eastern Karnataka Road Transport Corporation.
- Over a period of time there might be a bias in the opinion.
3.11 Chapter Scheme:
The study has been carried out and presented in the following chapters:

**Chapter I** deals with Introduction, Historical Background of Karnataka State Road Transport Corporation and Profile of North Eastern Karnataka Road Transport Corporation

**Chapter II** deals with an Overview of Services Marketing, which includes: Reasons for Growth of Service Sector, Service Concept, Classification of Services, Types of Services, Difference between Products and Services, Marketing Mix of Services, Management of Service Demand and Supply, Managing Service quality, Managing Service Competition, Organising for Services Marketing, Marketing Strategy of Services

**Chapter III** deals with Research Design, which includes Introduction, Review of Literature, Statement of the Problem, Objectives of the Research, Methodology, Sampling, Scope of Study, Tools and Techniques of Data Collection, Period of Study and Limitations of Study

**Chapter IV**

4.1 deals with Service product in North Eastern Karnataka Road Transport Corporation and Commuter’s Opinion towards the Services offered by North Eastern Karnataka Road Transport Corporation.

4.2 deals with the Pricing of Services of North Eastern Karnataka Road Transport Corporation and Commuter’s Opinion towards Pricing of North Eastern Karnataka Road Transport Corporation services.

4.3 deals with Promotion of Services of North Eastern Karnataka Road Transport Corporation Commuter’s Opinion towards Promotion of North Eastern Karnataka Road Transport Corporation services

4.4 deals with Distribution of Service Products and Commuter’s Opinion towards the way Transportation Services are delivered by North Eastern Karnataka Road Transport Corporation.

4.5 deals with Process of Services Marketing of North Eastern Karnataka Road Transport Corporation and Commuter’s Opinion towards it.
4.6 deals with Commuter’s Opinion towards Physical Evidence of North Eastern Karnataka Road Transport Corporation.

4.7 deals with People dimension in Services Marketing of North Eastern Karnataka Road Transport Corporation and Commuter’s Opinion towards different Personnel involved in the Service Delivery.

4.8 deals with Management of Demand and Supply of services at North Eastern Karnataka Road Transport Corporation.

4.9 deals with Customer Service and Facilitation in North Eastern Karnataka Road Transport Corporation and also Commuter’s Expectations from North Eastern Karnataka Road Transport Corporation.

Chapter V deals with Summary of Findings and Conclusion

Chapter VI deals with Scheme of Recommendations (including future directions of research)